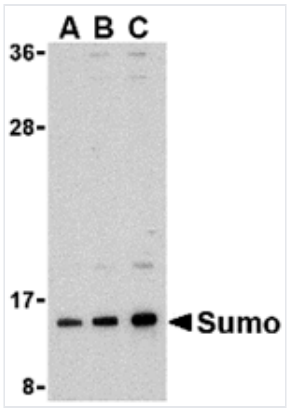
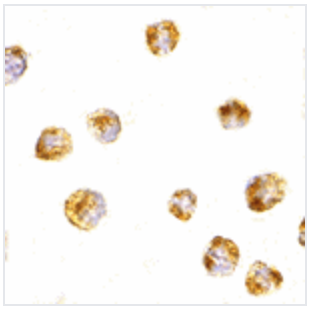
SUMO Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Sumo, Polyclonal Antibody
Full Product Name	Sumo Antibody
Product Gene Name	anti-Sumo antibody
Product Synonym Names	small-ubiquitin-like modifier 1, ubiquitin-like protein 1, GAP-modifying protein 1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Supplied in PBS containing 0.02% sodium azide.
Purity/Purification	Affinity chromatography purified via peptide column
Preparation and Storage	Can be stored at -20 degree C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Molecular Weight	8,799 Da
OMIM	601912
Immunogen Type	Peptide
Immunogen Description	Raised against a 14 amino acid peptide from near the amino terminus of human sumo.
Target Name	Sumo
Product Categories/Family for anti-Sumo antibody	Total protein Ab
Applications Tested/Suitable for anti-Sumo antibody	ELISA (EIA), Western Blot (WB), Immunohistochemistry (IHC)
Related Product Information for anti-Sumo antibody	The sumo family of proteins is related both structurally and functionally to ubiquitin in that they are post-translationally attached to the e-amino group of a lysine residue of the substrate protein. This sumoylation plays a number of roles in DNA replication and repair, protein targeting to various subnuclear structures, and the regulation of numerous cellular processes including the inflammatory response in mammalian cells. Sumo was initially identified as a covalent modification of RanGAP1 in studies on nuclear import in mammalian cells. More recently, sumo has been shown to be involved in the regulation of transcription factors, possibly by enhancing their interactions with co-repressors. Sumo is also thought to play some role in the modulation of ubiquitin-mediated degradation of proteins by acting as an inhibitor. At least four different isoforms of sumo are known to exist; Sumo antibody will only recognize isoform 1.
Other Notes	Small volumes of anti-Sumo antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Sumo purchase	MBS9401295 is an antibody targeting Sumo. Also known as Sumo Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-Sumo antibody
Western blot analysis of sumo in HL-60 cell lysate with sumo antibody at (A) 0.5, (B) 1, and (C) 2 ug/mL.



Immunocytochemistry (ICC) of anti-Sumo antibody
Immunocytochemistry of Sumo in HL60 cells with Sumo antibody at 5 ug/mL.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Sumo. It may not necessarily be applicable to this product.

NCBI GI #	42490984
NCBI GeneID	7341
NCBI Accession #	AAH66306
UniProt Secondary Accession #	P55856; Q6FGG0; Q6NZ62; Q93068; A8MUS8; B2R4I5
UniProt Related Accession #	P63165
NCBI Official Full Name	SMT3 suppressor of mif two 3 homolog 1 (S. cerevisiae)
NCBI Official Synonym Full Names	small ubiquitin-like modifier 1
NCBI Official Symbol	SUMO1
NCBI Official Synonym Symbols	DAP1; GMP1; PIC1; SMT3; UBL1; OFC10; SENP2; SMT3C; SMT3H3
UniProt Protein Name	Small ubiquitin-related modifier 1
UniProt Synonym Protein Names	GAP-modifying protein 1; GMP1; SMT3 homolog 3; Sentrin; Ubiquitin-homology domain protein PIC1; Ubiquitin-like protein SMT3C; Smt3C; Ubiquitin-like protein UBL1
Protein Family	SUMO-activating enzyme
UniProt Gene Name	SUMO1
UniProt Synonym Gene Names	SMT3C; SMT3H3; UBL1; SUMO-1; GMP1; Smt3C
UniProt Entry Name	SUMO1_HUMAN
NCBI Protein Information	small ubiquitin-related modifier 1
NCBI Summary for Sumo	This gene encodes a protein that is a member of the SUMO (small ubiquitin-like modifier) protein family. It functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. It is not active until the last four amino acids of the carboxy-terminus have been cleaved off. Several pseudogenes have been reported for this gene. Alternate transcriptional splice variants encoding different isoforms have been characterized. [provided by RefSeq, Jul 2008]

UniProt Comments for Sumo	SUMO1: Ubiquitin-like protein that can be covalently attached to proteins as a monomer or a lysine-linked polymer. Covalent attachment via an isopeptide bond to its substrates requires prior activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, and can be promoted by E3 ligases such as PIAS1-4, RANBP2 or CBX4. This post-translational modification on lysine residues of proteins plays a crucial role in a number of cellular processes such as nuclear transport, DNA replication and repair, mitosis and signal transduction. Involved for instance in targeting RANGAP1 to the nuclear pore complex protein RANBP2. Polymeric SUMO1 chains are also susceptible to polyubiquitination which functions as a signal for proteasomal degradation of modified proteins. May also regulate a network of genes involved in palate development. Interacts with SAE2, UBE2I, RANBP2, PIAS1 and PIAS2. Interacts with PARK2. Covalently attached to a number of proteins such as IKFZ1, PML, RANGAP1, HIPK2, SP100, p53, p73-alpha, MDM2, JUN, DNMT3B and TDG. Also interacts with HIF1A, HIPK2, HIPK3, CHD3, EXOSC9, RAD51 and RAD52. Interacts with USP25 (via ts SIM domain); the interaction weakly sumoylates USP25. Belongs to the ubiquitin family. SUMO subfamily. Protein type: Ubiquitin-like modifier; Nuclear receptor co-regulator Chromosomal Location of Human Ortholog: 2q33 Cellular Component: nucleoplasm; PML body; nuclear membrane; dendrite; cytoplasm; fibrillar center; nucleolus; nuclear speck; synapse; nuclear pore; nucleus Molecular Function: protein binding; ubiquitin protein ligase binding; transcription factor binding; SUMO ligase activity Biological Process: positive regulation of protein complex assembly; cellular protein metabolic process; regulation of protein localization; protein sumoylation; negative regulation of transcription factor activity; cytokine and chemokine mediated signaling pathway; positive regulation of proteasomal ubiquitin-dependent protein catabolic process; PML body organization and biogenesis; palate development; post-translational protein modification; DNA repair; negative regulation of transcription, DNA-dependent; negative regulation of DNA binding Disease: Orofacial Cleft 10
Research Articles on Sumo	**1.** reveals an unexpected role of SUMO-1 and SAFB in the stimulatory coupling of promoter binding, transcription initiation and RNA processing
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/sumo/9401295